

2. (Amended) A protein of claim 1 wherein said derivative or fragment [is] comprises a hydrophilic region of said receptor.

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concd. 3. (Amended) A protein of claim 2 wherein said derivative or fragment [is] comprises an extracellular hydrophilic region of said receptor.

4. (Amended) [A] An isolated protein [of claim 1] having a sequence selected from the group consisting of [represented by SEQ ID NO] SEQ ID NOs: 2, 3, 4, 5, 6 and 7.

5. (Amended) A protein of claim 1 herein said derivative or fragment [is] comprises at least one sequence selected from the group consisting of any one of SEQ ID NO: 3-7.

A3 17. (Amended) A [pharmaceutical] composition which comprises a protein, derivative or fragment according to claim 1 [as an active component].

A4 21. (Amended) A [pharmaceutical] composition [according to claim 17 for diagnosis of male reproduction disorders] comprising a protein according to claim 4.

A5 23. (Amended) A method of isolating a ligand specific for an epididymis-specific receptor comprising incubating the epididymis-specific receptor protein of claim 1 with a substance suspected to be a ligand of said receptor and detecting binding of said receptor to said ligand.

26. (Amended) A method of treating infertility in a male mammal comprising administering an agonist of an epididymis-specific receptor protein of claim 1 to said male mammal.

27. (Amended) A contraceptive method for male mammals comprising administering an antagonist of an epididymis-specific receptor to said male mammal wherein said antagonist comprises a protein, derivative or fragment of claim 1.

30. (Amended) A method of diagnosing infertility in a male comprising measuring from said male to an epididymis-specific receptor protein of claim 1.

REMARKS

Reconsideration is requested.

Claims 1-30 are pending. The Examiner is requested to contact the undersigned in the event the Examiner believes the claims are directed to separately patentable subject matter.

With regard to the Section 101 rejection of claims 1-5, 17, 21, 31-38 and 48-51 stated in the June 9, 2000 Office Action of the parent application, the Examiner is requested to consider the following and the attached.

The Examiner's reliance on Brenner v. Manson 148 USPQ 689 (S Ct 1966) is misplaced as the Patent Office has previously acknowledged that Brenner dealt with the rare situation where